

University of Pune
Department of Management Sciences
MBA-BT Semester IV
Semester End Exams April 2011

404- Emerging Trends in Biotechnology

Maximum Marks: 60

Time: 3Hrs

Answer any four questions. Each carries 15 marks.

- Q1. a)** What is Tissue Engineering? Explain.
b) What are the various applications of tissue engineering?
c) Discuss the challenges of this technique.
- Q2. a)** What is a vaccine? Why is vaccination necessary? List three vaccine preventable diseases.
b) What are the various types of vaccines available today?
c) Natural build up of immunity is better than vaccination. Give your opinion and justify.
- Q3. a)** A research laboratory has received funding to develop a drug for a rare form of brain cancer.
What are the latest technologies available to them? List
Which one would you use to achieve this goal and why?
b) Explain the procedure in a flow chart
c) List other applications for the technique selected.
- Q4. a)** What is proteomics? Explain in brief.
b) What are its applications?
c) What are the challenges and problems faced in use of Proteomics?
- Q5. a)** What are Drug delivery systems? List all traditional drug delivery systems available.
b) Briefly discuss the latest developments in DDS
c) Explain TDDS.
- Q6. a)** What is DNA Microarray? Explain.
b) What are its applications?
c) DNA Microarray has changed the pace of drug development. Discuss
- Q7. Write short notes on any two**
a) Gene Therapy, applications and challenges
b) Antibody Engineering, success and failures
c) Biotechnology : Boon or bane to mankind